Keenan Kidwell

The University of Texas at Austin
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Citizenship

United States Citizen.

Research Interests

My mathematical interests include the classical and p-adic Langlands programs, p-adic Galois representations, nonarchimedean geometry, and Iwasawa theory.

Education

The University of Texas at Austin, Austin, TX

Ph.D. in Mathematics, May 2014

Thesis Advisor: Mirela Çiperiani

Arizona State University, Tempe, AZ

B.S. in Mathematics (Summa cum Laude), May 2008

Employment

The University of Texas at Austin, Austin, TX

Assistant Professor of Instruction, September 2018 - Present

Lecturer, August 2017 - August 2018

Indiana University, Bloomington, IN

Zorn Postdoctoral Fellow, August 2014 - May 2017

Publications

[1] On the structure of Selmer groups of p-ordinary modular forms over $\mathbf{Z}_p$-extensions, *Journal of Number Theory*, Vol. 187 (2018), 296-331.

[2] Unitary completions of locally algebraic and locally analytic principal series of p-adic GL_2, *International Journal of Number Theory*, Vol. 12, No. 7 (2016), 1765-1781.

Teaching Experience

The University of Texas at Austin:

Spring 2019: Introduction to Mathematics, Linear Algebra and Matrix Theory (two sections)

Fall 2018: Discrete Mathematics, Structure of Modern Geometry (two sections)

Summer 2018: Linear Algebra and Matrix Theory

Spring 2018: Introduction to Number Theory, Calculus II (two sections)

Fall 2017: Multivariable Calculus, Introduction to Real Analysis (two sections)

Reading Courses:

Spring 2019: Ricardo Velasquez

Indiana University:

Spring 2017: Calculus I

Fall 2016: Linear Algebra for Undergraduates (two sections)

Spring 2016: Algebraic Varieties II

Fall 2015: Linear Algebra for Undergraduates (two sections)

Spring 2015: Introduction to Differential Equations I

Fall 2014: Calculus I, Linear Algebra for Undergraduates

Reading Courses:

Summer 2015: Sharanya Pillai

Spring 2015: Calvin Woo

Selected Presentations

"On p-adic representations of the absolute Galois group of $\mathbf{Q}_p$ with open image," IU Algebra Seminar, September 26th, 2016

"Unitary Completions of Locally Analytic Principal Series of p-adic GL_2," IU Algebra Seminar, December 1, 2014

"Unitary Completions of Parabolically Induced Representations of GL_2 over a p-adic field," IU Algebra Seminar, April 28, 2014

"The Functor of Points: An Introduction to Functorial Algebraic Geometry," UT Austin Junior Number Theory Seminar, April 10, 2012

"Iwasawa Theory for Elliptic Curves," UT Austin Junior Number Theory Seminar, September 6, 2011

"$\mathbf{Z}_p$-extensions, Λ-modules, and Galois Cohomology," UT Austin Junior Number Theory Seminar, February 8, 2011

Honors and Awards

2016 - 2017 NSF Conference Award DMS-1565624: The p-adic Langlands Program and Related Topics, 2016

2015 Indiana University Institute for Advanced Study Conference Grant: The p-adic Langlands Program and Related Topics

October, 2009 Frank Gerth III Graduate Excellence Award, The University of Texas at Austin

May, 2008 Charles Wexler Mathematics Prize, Arizona State University

Service

Co-organizer of The p-adic Langlands Program and Related Topics (with Matthias Strauch), Indiana University, August 2015 - May 2016

Faculty co-mentor of the undergraduate math club (with Matt Hogancamp), Indiana University, August 2015 - May 2016

Organizer of the undergraduate math club, The University of Texas at Austin, January 2012 - January 2013

Department of Mathematics ombudsman, The University of Texas at Austin, January 2012 - January 2013

Organizer of the Junior Number Theory Seminar, The University of Texas at Austin, August 2009 - January 2011

References

Mirela Çiperiani, `mirela@math.utexas.edu`

Jiri Dadok, `dadok@indiana.edu`

Jeff Hatley, `hatleyj@union.edu`

Peter Sternberg, `sternber@indiana.edu`

Matthias Strauch, `mstrauch@indiana.edu`

Bill Wolesensky, `wolesensky@math.utexas.edu`

Last updated: February 9, 2019